

## Strategic Water Supply Plan Ad Hoc Committee Meeting #8

### Minutes

June 3, 2014

Building A, Conference Rooms C and D

#### **Attendees**

- Presenters: John Rehring, Amber Wooten
- Councilmembers: Mayor Rosenthal, Miller, Holman
- Ad Hoc Committee Members: Sandy Bahan, Roger Frech, Jim Gasaway, Stephen Tyler Holman, Samantha Kahoe, Matthew Leal, Curtis McCarty, Lynne Miller, Amanda Nairn, Judith Wilkins
- Public: Tessa Breder, Jay Cervi, Jacy Crosbie,
- Staff: Mark Daniels, Bryan Hapke, Ken Komiske, Chris Mattingly, Debbie Smith, Charlie Thomas, Gay Webb

Mr. Komiske thanked Committee members for attending the meeting today and announced a public meeting will be held tonight at 6:30 p.m. to review the final portfolios.

#### **Presentation**

Mr. Rehring said the goal of this meeting is to get feedback from the Committee to help make a recommendation to Council. Mr. Rehring gave a status and progress update on the Strategic Water Supply Plan (SWSP). Based on feedback received from previous meetings, the focus has narrowed to two water supply portfolios, Portfolio 13 and 14. Both portfolios share many of the same existing water supplies. The major difference between them is Portfolio 13 focuses on partnering with Oklahoma City for regional water supplies from Southeast Oklahoma while Portfolio 14 focuses on taking highly treated water from the Water Reclamation Facility and augmenting Lake Thunderbird.

- Portfolio 13 – Regional raw water (co-owner with Oklahoma City)  
Lake Thunderbird firm yield (6 mgd)  
Existing wells (8 mgd)  
Additional conservation and non-potable reuse (2 mgd)  
Regional supplies via Oklahoma City (13 mgd)  
*Capital Cost - \$340 Million*  
*Operations and Maintenance - \$23 Million per year*
- Portfolio 14 – New wells and Lake Thunderbird Augmentation  
Lake Thunderbird firm yield (6 mgd)  
Existing wells (8 mgd)  
New groundwater wells (2 mgd)  
Additional conservation and non-potable reuse (2 mgd)  
Lake Thunderbird Augmentation (11 mgd)  
*Capital Cost - \$270 Million*  
*Operations and Maintenance - \$22 Million per year*

Mr. Rehring discussed capital costs, phasing timelines and recent state and national regulatory and policy developments relevant to the 2060 Strategic Water Supply Plan discussion.

### **Path Forward**

Mr. Rehring said feedback gathered from this meeting and the public meeting scheduled tonight will be used to make a recommendation to City Council. We anticipate Council will consider it for action and finalize the SWSP and move forward towards implementation.

Mr. Rehring asked members for their input on which portfolio meets the community's priority objectives and asked what concerns they may have associated with these portfolios.

### **Questions and Feedback on Preferred Portfolios**

Comment: I am leaning towards Portfolio 14. My biggest concern is what will happen to Lake Thunderbird if we discharge treated water to it. How do we reassure the public that reuse is safe?

Response: The intent of the regulations being developed by the Oklahoma Department of Environmental Quality (ODEQ) is to provide public safety and protect the water quality in Lake Thunderbird.

Comment: Are there any commitments to downstream users that would prevent us from reusing our Water Reclamation Facility effluent?

Response: This hasn't been tested in Oklahoma yet, but, based on the amount that we discharge, we have good reasons to believe that it would be possible for us to reuse the effluent. Portfolio 14 includes continued discharge of a portion of Norman's treated effluent at all times through at least 2060.

Comment: Senate Bill 1187 states that no water can be added to Lake Thunderbird which has a pollutant that exceeds the concentration in the Lake. The water added can only be cleaner.

Comment: Do we have enough storage capacity in Lake Thunderbird for augmentation?

Response: The intent of augmentation is that you would add water to the lake when it is not full, essentially extending the amount of time that it takes to empty the reservoir volume that is allocated to our use. When the lake is full, all of the plant's effluent could be discharged to the South Canadian River as it currently is permitted. There would likely be two trains at the Water Reclamation Facility so that water receives treatment appropriate for its intended use (higher treatment is being used for reuse, current treatment if discharged to the South Canadian).

Comment: Why does Portfolio 13 not have any new groundwater wells?

Response: Technically, we could add a few new wells to Portfolio 13 and reduce the supply from the partnership with Oklahoma City. However, the savings of reducing the Oklahoma City supply does not offset the increase in cost to add a few new wells. You would see a net increase in the cost of Portfolio 13.

Comment: Will medicinals flushed down the toilet be passed on to Lake Thunderbird or will they be removed during treatment?

Response: There are elements of medicinals that are currently discharged into the river now. There is a lot of science going on right now to determine concentration levels that would be allowable. Applied research is helping.

Comment: Do recent Oklahoma City water supply shortages affect their willingness to partner with us?

Response: There have been no indications of this. Increasing supplies through the Atoka pipeline will further increase supply reliability.

Comment: You mentioned that we were already seeing a possible reduction in our groundwater supply; please explain further.

Response: Recently, there have been a few wells that have arsenic levels nearing the regulated level and these could potentially have to be taken offline. Also, there are three wells that are nearing the regulated level for gross-alphas (measurement of various naturally-occurring radionuclides).

Comment: How have we positioned ourselves to accommodate future regulations?

Response: An example would be adding Biofiltration and ozone treatment for reclaimed water to our Water Reclamation Facility. These processes are not required for current discharge, and depending on the final ODEQ regulations on reuse, may or may not be required. However, evidence shows that these processes are successful at meeting stringent treatment requirements of other states (including effective treatment for some non-regulated contaminants such as pharmaceuticals and personal care products).

Comment: Where do we go from here?

Response: The intent of today's Ad Hoc Committee meeting and tonight's Public meeting is to get a clear direction about which portfolio should be recommended to the City Council. If the direction is not clear, that lack of preference will be presented to Council.

Comment: It is the local control component of Portfolio 14 that causes me to favor it.

Comment: How does the cost of treating groundwater compare to water from Southeast Oklahoma? I am in favor of local control, water reuse, increase wells and a smaller participation in the pipeline just so we are not locked out of it.

Response: Our local groundwater supplies have very low operational costs relative to our other sources, although costs will go up when we have to treat for chromium-6.

Comment: When presenting recommendations to the Council, I have two suggestions: present a summary analysis of pros/cons and consider scenario planning.

Comment: How was population growth projected?

Response: We used the population projections from the Norman 2025 Land Use Plan and growth rate of about 1500 people per year to project beyond 2025. This value is consistent with historical growth patterns. If growth occurs faster or slower than projected, the water supply projects could be moved up or delayed.

Comment: If we decide to pursue Lake Thunderbird augmentation now, will we still be able to buy water from Oklahoma City in the future?

Response: Maybe. It depends on how large Oklahoma City builds the pipeline and how they choose to allocate its use, but even if we are not able to buy water continuously, we may be able to buy it intermittently as we do now.

Comment: I favor Portfolio 14. It does not make sense to keep flushing our water down the South Canadian River while building a 100 plus mile pipeline to bring in water.

Comment: Is there concern about how reuse will affect lake ecology in terms of lake level and water quality?

Response: The lake level is variable based on current usage. Reuse would add water to the lake reducing the amount of time that the lake is at low levels. Water quality impacts will be addressed and protected by the regulations.

Comment: What is the length of the Atoka parallel pipeline?

Response: About 100 miles

Comment: I worry that we will not be able to implement Lake Thunderbird augmentation fast enough. I would like to see the implementation moved up sooner.

Response: The date shown in the SWSP is conservative based on assumptions regarding regulatory timelines, but recent actions by the Legislature and ODEQ indicate that implementation could happen sooner than 2025 (current timeline in SWSP).

Comment: What happens if we do not select a portfolio?

Response: Essentially, taking no action will result in purchasing more treated water from Oklahoma City as a wholesale customer. The current wholesale agreement with Oklahoma City allows Norman to buy water when available at a rate of \$5.23 per thousand gallons. Norman sells water for approximately \$2.10 per thousand gallons (with rates depending on amount used). This is not a sound business model. Additionally, there is limited capacity in the existing Oklahoma City connection. There is no capital money available for new groundwater wells or a new connection with Oklahoma City.

Comment: We need to let the people know the cost to do nothing.

Comment: Oklahoma City is in the process of increasing their rates by six percent per year for the next five years.

Comment: On the regional solution, would we receive untreated water?

Response: Yes, we looked at both raw and treated water but, with feedback we received, the preference is raw water that we would treat ourselves.

Comment: What is the cost of untreated water?

Response: Oklahoma City is finishing a rate study now to determine costs.

Comment: Would we partially own the line from Southeast Oklahoma?

Response: You would own capacity in the line.

Comment: Did you figure in maintenance costs of the pumps and line?

Response: Yes.

Comment: What do you think the cost will be to treat for chromium-6 and arsenic issues?

Response: There will be capital costs and operating costs. We do have assumptions built in.

Comment: If we were to choose P13, when we are planning for future facility upgrades, would we still plan for Lake Thunderbird augmentation and have that option later down the road?

Response: At the Water Reclamation Facility you probably wouldn't put in Biofiltration or ozone treatment unless there was some other regulatory driver but there would be nothing to preclude you from doing that in the future.

Comment: Are there other communities talking about buying into the Southeast Oklahoma pipeline?

Response: In 2009, there were 11 communities in the metro considering it; since that time, some communities have opted not to join.

Mr. Rehring said from comments received today, there seems to be a little more support for Portfolio 14. Mr. Komiske and Mr. Rehring thanked Committee members for their input and contributions over the past eight meetings.

The meeting adjourned at 1:25 p.m.

Items submitted for the record:

1. Power Point presentation entitled, 2060 Strategic Water Supply Plan Ad Hoc Committee Meeting June 3, 2014